## Annual Report – Calendar Year 2013 Kentucky Wetland and Stream Fee-In-Lieu-Of Mitigation Program

In Accordance with

"Modification Number One of the Agreement Concerning In-Lieu Mitigation Fees
between the U.S. Army Corps of Engineers and
the Kentucky Department of Fish and Wildlife Resources"

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#### Introduction

This report provides information on the Kentucky Wetland and Stream Mitigation "Fee In-Lieu of" (FILO) Program administered out of the Kentucky Department of Fish and Wildlife Resources (KDFWR) for the calendar year 2013. This is the second annual report under the modified agreement (Instrument) between the U.S. Army Corps of Engineers (USACE) and KDFWR (USACE, 2011). The report includes summary information, program, credit, financial and project status, staffing, and activities performed during 2013 to fulfill the reporting requirements of the Instrument. The report includes program activities in the Louisville, Nashville, and Memphis USACE district offices. Throughout this report, the point (January 2012) at which the FILO program began operating under the Instrument is referred to as the "Transition."

In July 2000, the Kentucky Legislature passed KRS 150.255, which established The Kentucky Wetland and Stream Mitigation Fund. The KDFWR Wetland and Stream Mitigation Program manages this fund to provide a consistent and successful approach to fulfill compensatory mitigation requirements associated with Clean Water Act Section 404 and Section 401, which are administered respectively by the USACE and the Kentucky Division of Water (KDOW). A Section 404 permit from the USACE and a Section 401 Water Quality Certification from KDOW are required for activities resulting in the permanent loss of streams or wetlands that require mitigation. The intent of the mitigation is to compensate for the permanent loss of aquatic functions within a defined watershed or regional area.

One option for 404 permit applicants to satisfy compensatory mitigation requirements is to pay a fee to an entity that is approved by the USACE to conduct the mitigation in-lieu of performing the mitigation themselves. This method of mitigation is termed "in-lieu fee mitigation." The Kentucky Wetland and Stream Mitigation Fund sponsors an in-lieu fee mitigation program that is supported by sales of mitigation credits to Section 404 permit applicants to satisfy regulatory requirements. The monies generated are used to implement projects that improve degraded streams and wetlands throughout the Commonwealth. The majority of restoration and enhancement projects are implemented on private lands; therefore, the success of the program is largely dependent on cooperation and development of partnerships with private landowners. The program also has the alternative of preserving high quality aquatic resources.

The USACE has agreements (Instruments) with two in-lieu fee programs (or sponsors) in Kentucky: Northern Kentucky University (NKU), servicing the northern Kentucky region, and KDFWR for the remainder of the Commonwealth (Figure 1). The Instruments between the sponsors and the USACE ensure that mitigation is completed, is sufficient to compensate for losses, provides permanent protection and long-term management, and adheres to applicable regulations and guidelines. By accepting in-lieu fee payments, the sponsor is assuming responsibility to provide compensatory mitigation pursuant to the terms of the agreement established with the USACE.

The Instrument defines the roles of an Interagency Review Team (IRT) of resource and regulatory agencies composed of the USACE, KDOW, U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (USEPA), pursuant to federal rules. The

function of the IRT is to review and comment on potential projects, monitoring reports, remedial management measures, credit releases, and instrument modification. The USACE consults with the IRT to provide oversight of mitigation programs. Although there are four USACE districts in Kentucky (Memphis, Nashville, Huntington, and Louisville), the Louisville District is the Lead District for communicating with the sponsor and coordinating with the IRT on issues related to the Instrument, and it has assumed jurisdiction for projects in the Huntington District's region of Kentucky. The individual districts are responsible for specific issues with projects under their jurisdiction.

The Instrument requires that all KFDWR in-lieu fee projects be permanently protected through conservation easements, the purchase of lands with deed restrictions, or long-term management plans on public properties such as U.S. Forest Service National Forest lands. For private lands, this involves identifying landowners willing to cooperate with the sponsor to donate or sell a Conservation Easement or sell the property fee-simple. Conservation easement boundaries for perennial and intermittent streams are typically 50-150 feet from each bank, although older projects were often of less width and ephemeral channels typically have 25 feet. Recent projects also have tended to be of greater length, usually several thousand feet, to provide more ecologically beneficial projects and an economy of scale.

#### **Updated Agreement**

The Instrument went into effect on January 13, 2012 by Public Notice from the USACE. Its purpose is to comply with the 2008 Final Mitigation Rule (USACE, 2008). The Instrument: 1) delineates service areas into ten units by dividing upper and lower reaches of three major river basins (Licking, Kentucky, and Cumberland) based on mitigation credit units; Eastern Kentucky Stream Assessment Protocol (EKSAP) and Ecological Integrity Units (EIUs) are used in the Eastern Kentucky Coalfield physiographic region and Kentucky Assessment Protocol (KAP) and Adjusted Mitigation Units (AMUs) are used in the remaining areas of the Commonwealth; 2) revises the service area boundary between the two in-lieu fee programs in northern Kentucky; 3) sets forth frameworks in each of ten service areas for prioritizing projects; 4) updates the requirements for mitigation plans, which must be submitted with each project; 5) transitions all funds collected under the previous agreement to a credit-based fee schedule; 6) establishes a 3-year time frame from the time fees are received for beginning construction; and 7) establishes an accounting framework for compliance based on advance credits and released credits.

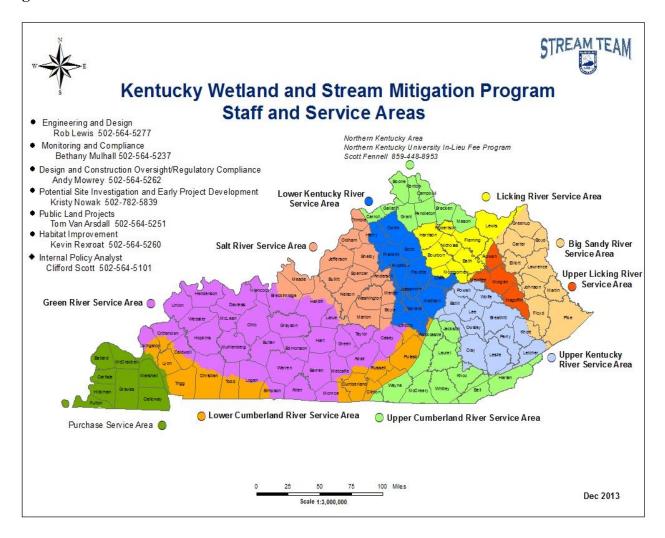
## **FILO Staff and Basin Assignments**

Two project managers/staff biologists, Nick Ozburn and B.J. Jamison, took positions in 2013 with the Baltimore District USACE and the Florida Fish and Game, respectively. The Internal Policy Analyst position that was vacated in September 2012 was filled in January 2013 by Clifford Scott. Also, the program hired Kevin Rexroat as Fish and Wildlife Management Foreman to primarily work on habitat construction and maintenance, including invasive species removal, to address compliance needs and long-term management actions. Thus, at the end of 2013, the FILO staff comprised seven individuals: Rob Lewis, P.E., Clifford Scott, Kevin Rexroat, Andy Mowrey, Bethany Mulhall, Tom Van Arsdall, and Kristy Nowak. The program also maintains a position filled by Nat Reynolds in Real Properties of the Finance Cabinet, and

Jessie Boles, a co-op from the University of Louisville School of Engineering, assisted staff in many ways both in the office and field throughout the year.

Previously, staff were assigned service areas comprised of major watersheds or public lands (Figure 1). During 2013, the workload was allocated functionally, with Mr. Lewis assuming program coordination in addition to his engineering and design responsibilities; Ms. Mulhall assigned to monitoring/inspection; Mr. Mowrey and Mr. Jamison to permitting/construction; and Ms. Nowak and Mr. Ozburn to project search/initial development. Mr. Van Arsdall retained his previous duties with all phases of projects on public lands. It is expected that the vacant positions in permitting/construction and project search/initial development will be filled early in 2014.

Figure 1.



## **Landowner Contacts and Potential Project Site Visits**

Because of the large number of credits present at Transition and sold in 2012-2013, a major effort during 2013 was to follow up on potential projects and initiate new contacts in the Big Sandy Service Area. Several of these resulted from the outreach effort in the service area in late 2011- early 2012 (KDFWR, 2012). The outreach resulted in three new projects in the Big Sandy Service Area. FILO staff also pursued several potential projects in other service areas initially identified in previous reporting periods. This, in combination investigating larger land tracts, resulted in a lower number of initial site visits than in previous reporting periods (Table 1).

Table 1. Initial Site Visits CY13

Table 1. Illitial Site	V 15165 C 1 15		
Service Area	Stream/wetland	County	Landowner/contact
Big Sandy	Bradley Br	Floyd	Dan Ballman
Big Sandy	Beaver Cr	Floyd	Donald Hansford
Big Sandy	Clifty Cr	Elliott	Darrell Johnson
Big Sandy	Trib to Laurel Cr	Elliott	Manning Realty
Big Sandy	Left Fk Laurel Cr	Lawrence	Carriage Gate Realty
Big Sandy	Beaver Cr	Floyd	City of Wayland
Big Sandy	Trib to Laurel Cr	Elliott	William and Carol York
Big Sandy	Clifty Cr	Elliott	Marquita Smith
Big Sandy	Buffalo Cr	Carter	Jeffry Lewis
Big Sandy	Smokey Valley	Carter	Smoky Valley Creek
Big Sandy	Caudill Br	Carter	Addington Properties
Big Sandy	Russell Fk	Pike	Breaks Interstate Park
Big Sandy	Trib to Sutton Br	Carter	Kurtis Lambert
Green	wetland	Henderson	Eric Gracey
Green	Boyds Cr	Barren	Anthony Tromboli
Green	Damron Cr	Russell	Keith Tarter
Green	Buckner Hollow Cr	Hart	Middleton Woods
Green	Caney Cr	Grayson	Ernie Perkins
Green	Dyer Hill Cr	Livingston	Ed Dunning
Green	Jones Cr/Mullins Br	Marion	Tarter Properties
Green	Green River	Taylor	Scott Smith
Green	Drakes Cr	Hopkins	Bowles
Green	100-Acre Pond	Hart	TNC
Green	South Fk Green River	Lincoln	Bobby Clarkson
Green	Ivey Cr	Warren	TNC
Green	Dundee wetland	Ohio	-
Lower Kentucky	Trib of Goose Cr	Franklin	Calvin Harper
Lower Kentucky	Mudlick Br wetland	Lincoln	Donna Estep
Lower Kentucky	wetland	Fayette	Jason Hale
Lower Kentucky	wetland	Henry	KY R WMA -KDFWR

Service Area	Stream/wetland	County	Landowner/contact
Upper Kentucky	Upper Sinking Cr	Lee	Carriage Gate Realty
Lower Licking			Everett House
Upper Licking	Trib to Licking River	Morgan	Manning Realty
Salt	Un-named trib	Nelson	David Haydon
Salt	Floyds Fk	Jefferson	Jason Nally,
Salt	Trib to Floyds Rk/wetland	Jefferson	Scott Martin
Lower Cumberland	Stice Cr	Marshall	Tom Harper

#### **Credit Costs and Status**

Transition funds were converted to credits at the rate applicable at that time, which was \$610 in the EIU region and \$215 in the AMU region (Table 2). This resulted in 27,315.0 EIUs, 36,549.0 stream AMUs, and 33.8 wetland AMUs that were considered as previously sold at the beginning of CY12. The Instrument established 240,000 advance stream credits in each service area to accommodate potential geographic changes in mitigation demand, primarily associated with highway projects. Also, 100 wetland AMU credits were established in each service area other than the Green and Purchase service areas, where 200 wetland AMU credits were provided. The transitioned credits were subtracted from the advance credits to arrive at the number of advance credits available at the beginning of CY12.

During 2012, the cost per EIU in the Big Sandy Service Area was increased to \$650 and the cost per stream AMU was increased to \$240. These credit costs were unchanged in 2013 (Table 2).

Another 6,756 EIUs, 23,122 stream AMUs and 14.288 wetland AMUs were sold by FILO in CY13. No credits were released during the year. Credit balances for streams and wetlands are shown for each service area in Table 3; individual credit sales and associated information are presented in **Appendix A**.

Table 2. Credit Costs (\$)

Service Area	Cost/	EIU	Cost/AMU		Cost/Wetland AMU
	Transition	End of	Transition	End of	
EIU Region	(Jan 2012)	<u>CY13</u>	(Jan 2012)	<u>CY13</u>	Transition/End of CY13
Big Sandy	610	650			30,000
Upper Licking	610	610			30,000
Upper Kentucky	610	610			30,000
Upper Cumberland	610	610			30,000
AMU Region					
Lower Licking			215	240	30,000
Lower Kentucky			215	240	30,000
Lower Cumberland			215	240	30,000
Green			215	240	30,000
Salt			215	240	30,000
Purchase			215	240	30,000

**Table 3. Advance Credit Balances** 

1 able 3. Advance Ci			Region				
	Big Sandy	<u>Upper</u> Kentucky	Upper Licking	<u>Upper</u> Cumberland			<u>Total</u>
Advance Credits	240,000.0	240,000.0	240,000.0	240,000.0			Total
Credits at Transition	23,103.0	0.0	258.0	3954.0			27,315.0
Credits Sold CY12	2,376.3	2,349.9	838.0	3,182.2			8,746.4
Cicuits Boid C 1 12	2,370.3	2,547.7	030.0	3,102.2			0,740.4
Credits Sold CY13	5,707.6	999.1	0.0	49.5			6756.2
Credits Released							
Reserve Released Credits							
Advance Stream EIU							
Balance	208,813.1	236,651.0	238,904.0	232,814.3			
		AMU	Region				
	Lower Kentucky	<u>Lower</u> Licking	Lower Cumberland	Green	Salt	Purchase Purchase	
Advance Credits	240,000.0	240,000.0	240,000.0	240,000.0	240,000.0	240,000.0	
Credits at Transition	0.0	11,419.0	6,977.0	14,251.0	3,883.0	19.0	36,549.0
Credits Sold in CY12	807.0	11,012.0	8,893.0	10,724.6	1,338.2	0.0	32,774.8
Credits Sold in CY13	14,654.2	0.0	1,917.7	1,621.9	4,928.0	0.0	23,121.8
Credits Released	,		,	ĺ	,		,
Reserve Released Credits							
Advance Stream AMU Balance	224,538.8	217,569.0	222,212.3	213,402.6	229,850.9	239,981.0	
		***					
	1	Wetla	<u>nds</u>				
_	Big Sandy	<u>Upper</u> <u>Kentucky</u>	<u>Lower</u> <u>Kentucky</u>	<u>Upper</u> <u>Licking</u>	<u>Lower</u> <u>Licking</u>		
Advance Credits	100.0	100.0	100.0	100.0	100.0		
Credits at Transition	3.550	0.000	1.800	0.000	0.980		6.330
Credits Sold in CY12	2.410	0.000	1.032	0.000	0.000		3.442
Credits Sold in CY13	0.024	1.200	3.170	0.000	0.000		4.394
Credits Released							
Reserve Released Credits Advance Wetland AMU							
Balance	94.016	98.800	93.998	100.000	99.020		
		Wetla	1				
	<u>Upper</u> Cumberland	<u>Lower</u> Cumberland	Green	Salt	Purchase		
Advance Credits	100.0	100.0	200.0	100.0	200.0		
Credits at Transition	2.250	9.980	10.280	2.540	2.300		27.350
Credits Sold in CY12	0.381	4.180	7.444	0.000	0.000		12.005
Credits Sold in CY13	3.360	0.000	3.814	1.900	0.820		9.894
Credits Released	3.300	0.000	3.01-1	1.500	0.020		7.074
Reserve Released Credits							
Advance Wetland AMU Balance	94.009	85.840	178.462	95.560	196.880		

## **Program Financial Status**

At the beginning of CY12, there was about \$19.1M of transitioned project funds, mostly in the Big Sandy Service Area (Table 4a). About \$10.7M more was received in CY12, resulting in about \$29.8M of project funds at the beginning of CY13. During CY13, over \$3.7M in credits were sold in the Big Sandy Service Area, and the Lower Kentucky and Salt service areas each had about \$1.2M in credits sold. (There was also nearly \$2.4M of excess Rogers Gap project funds returned to the Lower Kentucky Service Area.) No credits were sold in the Lower or Upper Licking service areas (Table 4b). As previously, the Big Sandy Service Area had by far the largest number of funds available for projects (\$14.9M).

Table 4a. Revised CY12 Service Area Receipts and Project Funds (\$)

					(1)	
					Project	
			]		Funds	
		CY 12	CY 12	CY 12	Available	Total
	CY 12	Receipts	Receipts to	Receipts to	w/	Project
	Total	to Admin	Reserve	Projects	Instrument	Funds - end
Service Area	Receipts	(10%)	(10%)	(80%)	Jan 2012	CY12
Big Sandy <sup>a</sup>	1,617,535	161,753	161,753	1,294,028	10,649,228	11,943,256
Upper Kentucky	1,433,372	143,337	143,337	1,146,698	0	1,146,698
Lower Kentucky	224,660	22,466	22,466	179,728	40,425	220,153
Upper Cumberland	1,951,884	195,188	195,188	1,561,507	1,859,495	3,421,002
Lower Cumberland	2,037,270	203,727	203,727	1,629,816	1,349,580	2,979,396
Upper Licking	510,895	51,090	51,090	408,716	117,934	526,650
Lower Licking	2,642,760	264,276	264,276	2,114,208	1,863,350	3,977,558
Salt	321,096	32,110	32,110	256,876	683,310	940,186
Green	2,630,370	263,037	263,037	2,104,296	2,529,296	4,633,592
Purchase	0	0	0	0	54,815	54,815
Total	13,369,842	1,336,984	1,336,984	10,695,874	19,147,433	29,843,307

<sup>\*</sup> Big Sandy amounts and totals differ from 2012 Annual Report due to 571,375 (not 646,375) refunds from Laurel Cr Gorge project should have been added to total receipts instead of total project funds (needed to have Admin & Reserve taken out since funds were allocated prior to transition)

Table 4b. CY13 Service Area Receipts and Project Funds (\$)

				(1)		
		CY 13	CY 13	CY 13		Total
	CY 13	Receipts	Receipts to	Receipts to	CY13	Project
	Total	to Admin	Reserve	Projects	Beginning	Funds - end
Service Area	Receipts	(10%)	(10%)	(80%)	Balance	CY13
Big Sandy	3,710,676	371,068	371,068	2,968,541	11,943,257	14,911,797
Upper Kentucky	645,470	64,547	64,547	516,376	1,146,698	1,663,074
Lower Kentucky	3,612,108 <sup>a</sup>	361,211	361,211	2,889,686	220,153	3,109,839
Upper	130,995	13,100	13,100	104,796	3,421,002	3,525,798
Cumberland			-,	- ,	- , ,	- , ,
Lower	460,251	46,025	46,025	368,201	2,979,396	3,347,597
Cumberland				-	-	
Upper Licking	0	0	0	0	526,651	526,651
Lower Licking	0	0	0	0	3,977,558	3,977,558
Salt	1,239,720	123,972	123,972	991,776	940,187	1,931,963
Green	503,664	50,366	50,366	402,931	4,633,592	5,036,523
Purchase	29,520	2,952	2,952	23,616	54,815	78,431
Total	10,332,404	1,033,240	1,033,240	8,265,923	29,843,307	38,109,230

<sup>&</sup>lt;sup>a</sup> Includes \$2,391,720 from returned Rogers Gap project funds

As in previous years, the majority of receipts in CY13 came from transportation projects. Municipal entities were the second highest user of the FILO program (Table 5).

Table 5. FILO Receipts by Source - CY13

<u>Source</u>	Receipts (\$)	Percentage of Total
KY Transportation Cabinet	4,524,232	57.0
Municipal	1,861,995	23.4
Development	elopment 1,172,230	
Mining	231,580	2.9
Other	150,648	1.9
Total	7,940,684	100.0

#### **Project Fund Status**

Table 6 shows: 1) project funds received in each of the ten service areas from Transition to the end of CY13 for stream and wetland; 2) funds allocated to "approved" projects during the year; and 3) funds remaining (unallocated) at the end of the year. Nearly \$29M is allocated to stream projects, up from about \$7M at the end of CY12. Conversely, total unallocated funds are about

\$9.2M, significantly down from the \$23.1M unallocated at the end of CY12. About \$1.5M will go toward wetland mitigation. Nearly half of total unallocated funds are in the Big Sandy service area, primarily from transitioned credits/funds, but these have been much reduced (\$8.8M to \$4.4M) in the past year. The FILO program has been able to allocate all funds in three of the service areas (Lower Kentucky, Upper Cumberland, and Lower Cumberland) and has an approved project (Otter Cr) for which allocation has yet to be made that will use all funds/credits in the Salt River Service Area. It is expected that prior to funds actually being needed in construction, additional credits will be sold in those service areas to make up the projected deficits in allocation.

Table 6. Allocated and Unallocated Project Funds for Stream and Wetland, by Service Area (\$)

	(ψ)	Stream			Wetland		Total
Basin	<u>Project</u>	Allocated	Unallocated	Project	Allocated	Unallocated	<u>Unallocated</u>
Big Sandy	14,773,504	10,544,716	4,228,788	138,293	0	138,293	4,367,081
Upper Licking	526,651	10,544,710	526,651	0	0	0	526,651
Lower Licking	3,955,499	1,885,000	2,070,499	22,059	0	22,059	2,092,558
Upper Cumberland	3,385,323	3,813,550	(428,227)	140,474	0	140,474	(287,752)
Lower Cumberland	3,022,793	5,050,028	(2,027,235)	324,804	0	324,804	(1,702,431)
Upper Kentucky	1,634,274	984,000	650,274	28,800	0	28,800	679,074
Lower Kentucky	2,968,566	3,507,000	(538,434)	141,273	0	141,273	(397,161)
Salt	1,829,236	20,000	1,809,236	102,727	0	102,727	1,911,963
Green	4,516,817	3,124,400	1,392,417	519,705	0	519,705	1,912,123
Purchase	3,002		3,002	75,429	0	75,429	78,431
Total	36,615,666	28,928,694	7,686,972	1,493,564	0	1,493,564	9,180,536

#### **Reserve Fund**

Pursuant to the Instrument, the Reserve Fund was established to fund additional mitigation projects, minor actions, long term management, and to serve as contingency. Interest accounts for one component of the Reserve; 90% of interest accrued following transition is placed in reserve. The other component of Reserve is comprised of 10% of credit sales (Table 7).

A revised reserve fund table from CY12 is provided that shows: 1) an addition of 10% of excess Laurel Creek Gorge project funds refunded and transitioned, and 2) a greater deficit from the Kentucky River Service Area at transition than was reported last year.

In CY13: 1) \$381,644 of Reserve was used to fund additional project costs on pre-transition projects (Upper Laurel Fk, Terrys Br, Middle Cr); 2) \$380,000 went toward property purchase on the Greene-Johnson project in the Laurel Creek Gorge area; and 3) 10% of excess funds returned from the Rogers Gap project were placed in Reserve. With \$3M required by the Instrument for minimum or non-wasting Reserve, active Reserve at the end of CY13 was \$8,236,103.

Table 7a. Revised CY12 Reserve Fund Activity and Balance(\$)

		J	(+)		
		10% to	85% to	90% to	
	<u>100%</u>	Reserve	Reserve	Reserve	<b>Balance</b>
Transition service area funds (Jan					
2012)	25,529,911	2,552,991			
CY12 receipts	12,798,468	1,279,847			
Transition interest (Jan 2012)	8,229,179		6,994,802		
KY R Service area deficit at					
transition <sup>a</sup>	(1,000,897)				
CY12 interest	1,151,220			1,036,098	
Reserve to Claysville project	(10,000)				
Returned funds - Laurel Cr					
Gorge <sup>b</sup>	571,375	57,137			
CY12 Revised balance					10,909,979
Non-wasting Reserve					(3,000,000)
Active Reserve					7,909,979

<sup>&</sup>lt;sup>a</sup> \$141,706 more deficit than included in CY12 Annual Report

Table 7b. CY13 Reserve Fund Activity and Balance(\$)

		· · · /		
		<u>10% to</u>	90% to	
	<u>100%</u>	Reserve	Reserve	<u>Balance</u>
Beginning balance	10,917,479			
CY13 receipts	7,940,684	794,068		
CY13 Interest	60,586		54,527	
Returned funds – Rogers Gap	2,391,720	239,172		
Greene-Johnson property				
purchase (at Laurel Gorge) <sup>a</sup>	(380,000)			
Reserve adjustment <sup>b</sup>	(381,644)			
CY12 Revised balance				11,236,103
Non-wasting Reserve				(3,000,000)
Active Reserve				8,236,103
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<sup>&</sup>lt;sup>a</sup>Reserve funding used for additional property purchase outside stream buffer zone

<sup>&</sup>lt;sup>b</sup> Not included in CY12 Annual Report

b Used to fund additional pre-transition project costs on Middle Cr, Upper Laurel Fk, Terrys Br

#### **Administrative Fund**

The Administrative Fund is used for expenses associated with activities to operate the program and to identify new projects, including outreach and property work; staff salaries; equipment; and other indirect expenses such as travel and training. The administrative fund balance going into CY13 was \$5,875,970 (see revised Table 8a from CY12). During 2013, 10% of post-transition receipts and interest was added to that amount was (Table 8). After expenses in CY13 of \$1,111,100, the administrative fund balance at the end of CY13 was \$5,804,169.

Table 8a. Revised CY12 Administrative Fund Activity and Balance (\$)

	<u>100%</u>	15% to Admin	10% to Admin	<b>Balance</b>
Transitioned service area funds (Jan 2012)	25,529,911	3,829,487		3,829,487
Transitioned Interest <sup>a</sup>	8,229,179	1,234,377		5,063,864
CY12 - Receipts	12,798,468		1,279,847	6,343,710
CY12 - Interest Distribution	1,151,220		115,122	6,458,832
CY12 - Returned funds (Laurel Creek Gorge) <sup>b</sup>	571,375		57,137	6,515,970
CY12 - Service accounts (budgeted from admin) <sup>b</sup>	(640,000)			5,875,970
CY12 REVISED Balance				5,875,970

<sup>&</sup>lt;sup>a</sup> revised from CY12 annual report – included total accrued interest since inception, prior to any adjustments

Table 8b. CY13 Administrative Fund Activity and Balance (\$)

	100%	10% to Admin	<b>Balance</b>
CY13 - Beginning Balance			5,875,970
CY13 - Receipts	7,940,684	794,068	6,670,038
CY13 - Interest Distribution	60,586	6,059	6,676,097
CY13 - Returned Funds (Roger's Gap)	2,391,720	239,172	6,915,269
CY13 - Administrative operating budget; payroll, travel, utilities, etc.	(1,000,000)		5,915,269
CY13 - Service Area Accounts <sup>a</sup>	(110,000)		5,805,269
CY13 - Closed Account (Ison Creek )	(1,100)		5,804,169
CY13 Balance			5,804,169

<sup>&</sup>lt;sup>a</sup>Service area project searches, title searches, appraisals and other actions to develop and secure projects

<sup>&</sup>lt;sup>b</sup> omitted from CY12 Annual Report

## **Mitigation of Impacts**

In the history of the FILO program, programmatic indicators have primarily been based on linear feet: length of stream mitigated and cost of mitigation per linear foot. Impact fees and mitigation were based on a standard of \$170/ft of stream affected. With the requirements of the 2008 Mitigation Rule fully taking effect with the Instrument early in 2012, mitigation has been accounted by credits. To phase in these requirements, the USACE put out a Public Notice (LRL-1999-760) in November 2009 that established fees to be paid for impacts of \$396 per Ecological Integrity Unit (EIU) in the Eastern Kentucky Protocol region of the Commonwealth (in the Eastern Coal Field Region), \$170 per Adjusted Mitigation Unit (AMU) for streams in the rest of the Commonwealth, and \$30,000 per wetland AMU in all parts of the Commonwealth. Also, as required by the 2009 Public Notice and the Instrument, the USACE must provide FILO with the number of credits necessary to compensate for impacts, and FILO must submit receipt for credit purchases to the USACE and the permittee. Thus, all permits issued after the date of the Public Notice must contain the necessary information to track credits from an impact and mitigation perspective. This information was infrequently collected for permits issued prior to the November 2009 Public Notice, although cost per credit was an important factor in the viability and approval of design/construction phases of proposed mitigation projects by the IRT.

Prior to this it was not possible to relate credits earned by mitigation impacts caused by 404-permitted activities because in-lieu-fee payments to FILO had little documentation of impacts, especially during the first few years of the in-lieu fee program. It was assumed that impacts and mitigation are occurring on similar stream flow types, resulting in similar linear feet and credits affected. Thus, programmatic success was based on cost per linear foot as in the previous MOA. The available data could track the amount of in-lieu fees received and the timing of the allocation of those funds to mitigation projects.

Projects begun prior to 2012 are tracked primarily on the basis of funds available vs. project costs and costs per foot. With implementation of the Instrument and conversion of unallocated funds to credits, it is possible to compare impacts (credits sold by FILO) to mitigation (credits realized by FILO projects) for projects begun (approved by IRT) in January 2012 and later.

## **Actions Taken by Interagency Review Team**

Eleven conceptual plans were submitted and ten projects were "approved" by the IRT in CY13; that is, the USACE was in support of the projects following the Conceptual Plan and site visit, although there may still be some response needed to IRT comments (Table 9). Ison Creek was tentatively approved, but the property was sold before action could be taken. Three other potential projects are awaiting approval early in 2014.

Table 9. Conceptual Plans Submitted and Other Actions of Interagency Review Team - CY13

Table 9. Conceptual		1	Actions of	Interagency Kevie	w Team - CY13
a.	Service	USACE			
Stream	Area	District	County	Type	Action Taken
Mart Whitt Fk	Big Sandy	Louisville	Lawrence	Enhancement, Preservation	IRT site visit Aug 2013; project approved IRT site visit Dec 2013;
Laurel Cr Tributary	Big Sandy	Louisville	Elliott	Rehabilitation Re-establishment	approval expected early in 2014  IRT site visit Dec 2013;
Clifty Creek	Big Sandy	Louisville	Lawrence	Rehabilitation; Re-establishment	awaiting approval upon submittal of responses to comments  IRT site visit Jan 2013;
White Oak Creek	Big Sandy	Louisville	Greenup	Rehabilitation	project approved
Old Trace Creek	Big Sandy	Louisville	Lewis	Rehabilitation, Re-establishment, Enhancement, Preservation	IRT site visit Jun 2013; project approved IRT site visit Apr 2013;
Ison Creek	Big Sandy	Louisville	Elliott	Rehabilitation Preservation	project terminated - property sold
Myers Station Farm	Lower Licking	Louisville	Nicholas	Rehabilitation, Re-establishment	IRT site visit Dec 2012; approved Jan 2013
Sinking Valley	Upper Cumberland	Nashville	Pulaski	Enhancement, Preservation	IRT site visit Apr 2012; project conditionally approved
Minors Creek	Lower Kentucky	Louisville	Owen	Rehabilitation; re-establishment; preservation; enhancement Rehabilitation, Re-establishment	IRT site visit Mar 2013; project approved  IRT site visit Apr 2013;
Ross Creek II  Boyd Creek	Kentucky  Green	Louisville  Louisville	Estill  Barren	Rehabilitation Re-establishment	IRT site visit Dec 2013; expecting approval early 2014
Goose Creek	Green	Louisville	Casey	Rehabilitation, Re-establishment, Preservation	IRT site visit Sept 2012; comments addressed; project approved Apr 2013
					IRT site visit Jul 2013; project approved; responses to comments submitted in Dec 2013 following feasibility study by design
Otter Creek	Salt	Louisville	Meade	Rehabilitation	engineer IRT site visit Aug 2013; project tentatively approved on satisfactorily addressing
Blue Spring Creek	Lower Cumberland	Nashville	Trigg	Rehabilitation Re-establishment	satisfactorily addressing comments
Bugg Tract Wetland	Purchase	Memphis	Hickman	Wetland Enhancement	IRT site visit May 2013; project disapproved

### **Project Statistics and Status**

A total of 69 projects have been approved for design by the IRT over the program's history. With the addition of seven new projects in 2013, there currently are 59 active projects, of which 32 (13 in AMU, 19 in EIU) are either built or in construction (**Appendix B**). Four other projects (Laurel Cr Gorge, Buck Cr, Sinking Valley, Forestland Tract) are preservation only. Nine projects are in the long-term management phase.

The program has preserved two tracts with high quality streams (Laurel Creek Gorge, Buck Creek) and 1,557 acres of their surrounding watersheds with over 24 miles of tributaries. Another 10,300 feet of stream length is being preserved on the two Ross Creek projects. FILO also contributed: 1) about 51% of the purchase of a 2,500-acre tract in Scott County for a project that preserves 6.0 miles of high quality intermittent and ephemeral streams and restores and enhances another 22.4 stream miles; and 2) purchase of 468 acres in Nicholas adjacent to Clay WMA (Myers Station project). Projects approved in 2013 will allow for additional purchases in 2014 of tracts on Minors Creek (309 acres in Lower Kentucky Service Area), Sinking Valley (804 acres with preservation quality streams in Upper Cumberland River Service Area), and Laurel Creek Gorge #2 (361 acres in Big Sandy Service Area with 12,000 feet of preservation).

Table 10 provides summary statistics for total cost, length, and credits, and cost per linear foot and cost per credit; Appendix B provides this data for individual projects. The average estimated project cost in the AMU region is now \$1.79M, is nearly 17,000 feet in length, gains 19,100 credits, and has a cost per credit of \$94 and a cost per foot of \$106. Also, 51.8 acres of wetland are included in projects (Eagle Cr Tributary, Forest Land Group, Cove Spring) in the AMU region at a total cost of \$491,406 or \$10,886 per wetland AMU.

Table 10. Summary Data for Projects in AMU and EIU Regions of Kentucky<sup>a</sup>

	AMU Region	EIU Region
Number of Active and Completed Projects	24	35
Number of terminated/unfunded		
projects that incurred costs	2	4
Total Estimated Project Cost	\$43,465,988	\$42,049,248
Total Estimated Stream Cost	\$42,974,582	\$42,049,248
Total Estimated Wetland Cost	\$491,406	-
Average Estimated Stream Project Cost	\$1,790,608	\$1,201,407
Total Length (ft)	406,158	426,948
Average Length (ft)	16,923	12,119
Cost/ft	\$106	\$98
Total Stream Credits	458,407	101,116
Average Stream Credits	19,100	2,889
Cost/stream credit	\$94	\$416
Total wetland credits (wetland AMUs)	45.14	-
Cost/wetland credit	\$10,886	-
<u> </u>		

<sup>&</sup>lt;sup>a</sup>Total costs include expenses incurred for terminated projects, but total length, total credits and average figures don't include the projects since there were terminated prior to construction.

In the EIU region, the average project is estimated at \$1.2M, is more than 12,000 feet in length, gains 2,889 credits, and has a cost per credit of \$416 and a cost per foot of \$98. It should be noted that the two large preservation projects in the EIU region significantly lower the cost per foot, and to a lesser extent the cost per credit, and therefore the average costs do not reflect the cost of a restoration project.

Brief descriptions of activities during this reporting period are provided below. Monitoring information and compliance status are presented in **Appendix C.** 

#### **Big Sandy Service Area**

There are twenty active projects (including repairs on Brushy Cr) in this service area, which is within the USACE Louisville District and EKSAP region using the EIU credit system (Figure 2).

<u>Barrett Creek, Carter County.</u> The IRT conducted a site visit on 9/5/12. There were no significant comments and the project conceptual plan was approved. The project is currently awaiting landowner approval to complete property phase and initiate design.

<u>Bolts Fork, Boyd County.</u> Construction and planting completed Fall/Winter 2013. The first year of monitoring will commence in 2014.

Brushy Creek, Greenup County. No action taken in CY13.

Brushy Creek Emergency Repair, Greenup County. No action taken in CY13.

Brushy Creek Emergency Repair 2, Greenup County. No action taken in CY13.

<u>East Fork Little Sandy #1, Lawrence County.</u> Monitoring has exceeded five years. Project was released from monitoring in a letter from the Corps in May 2013. Project will be periodically monitored for easement encroachments and appropriate measures taken if needed.

East Fork Little Sandy #2, Lawrence County. Year 3 monitoring completed and report was submitted.

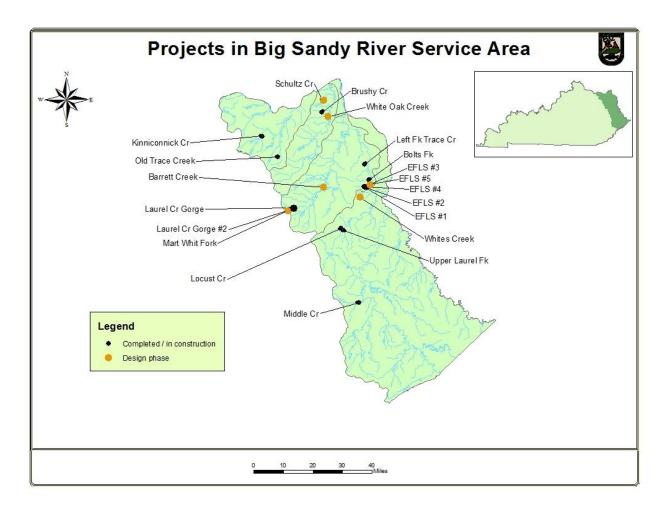
East Fork Little Sandy #3, Lawrence County. Year 3 monitoring completed and report was submitted.

East Fork Little Sandy #4, Lawrence County. Year 3 monitoring completed and report was submitted.

East Fork Little Sandy #5, Lawrence County. The design engineer is completing design of the project. Permit applications have been submitted and comments on the Mitigation Plan have been received. A change of scope to move the waterline and construction funds were approved in FY11. Property and permanent protection issues are not resolved; no additional action taken in CY13.

<u>Kinniconick Creek/Indian Creek</u>, <u>Lewis County</u>. Additional funding for repairs was requested and approved in December 2011. Repairs commenced in November 2013 and are expected to be completed in early 2014. Discussions have been made regarding releasing sections of Lower Indian and Kinniconick Creek from monitoring, and continue to monitor Upper Indian (upstream of low water crossing) where majority of repair work occurred. The Year 5 monitoring report was submitted.

Figure 2.



<u>Laurel Gorge Preservation</u>, <u>Elliott County</u>. The site was dedicated in FY10 as the Ed Mabry-Laurel Gorge WMA. The deed restrictions staved off the threat of potential road construction. No encroachments or incompatible uses were observed in 2013.

<u>Laurel Creek Gorge #2. Elliott County.</u> IRT site visit was conducted 7/27/12. The project began with three tracts of land (Friend, Greene, and Johnson), but now only consists of the two Greene and Johnson tracts with 360 acres. The remaining two tracts were approved with no significant comments. The Friend tract acquisition was terminated due to owner's refusal of the appraised purchase offer. The remainder of the purchase is proceeding with appraisals and boundary survey. Closing of purchase expected early 2014.

<u>Left Fork Trace Creek</u>, <u>Boyd County</u>. Repairs and maintenance were completed in November 2013. Project release letter expected from the Corps early 2014. Now in the long-term management phase, the project will be periodically monitored for easement encroachments and appropriate measures taken if needed.

<u>Locust Creek</u>, <u>Lawrence County</u>. Year 4 monitoring completed and report was submitted.

<u>Mart Whitt Fork, Elliott County.</u> Approved in 2013. The project includes purchase of 386 acres and preservation of over 13,000 feet of stream length. The tract will become part of the Laurel Creek Gorge-Ed Mabry WMA.

<u>Middle Creek</u>, <u>Floyd County</u>. Year 5 monitoring report submitted in 2012. Report of intended maintenance activities submitted in 2013. Monitoring period extended. Repair and maintenance tasks are scheduled to occur during 2013-2014 including easement boundary marking, invasive plant control and supplemental native planting.

Old Trace Creek, Lewis County. Approved in 2013. Design will begin in 2014. The project has over 20,000 feet of stream length, including 3,483 feet of preservation.

<u>Schultz Creek, Greenup County.</u> Project is with Real Properties because of title issues. Additional landowners from a previous inheritance were discovered, and additional submittals to Real Properties will be required. No action taken for CY13.

<u>Upper Laurel Creek</u>, <u>Lawrence County</u>. Year 5 monitoring completed and report was submitted. Monitoring period extended. Maintenance tasks to occur in 2014 include invasive plant control and supplemental native planting

White Oak Creek, Greenup County. Approved in 2013. Easement issues have been resolved and design will begin in 2014.

Whites Creek, Boyd County. IRT site visit was conducted 9/5/12. There were no significant comments; and the project is considered approved. Real Property's appraisals were conducted and landowner contract should be signed early in 2014.

#### **Upper Cumberland River Service Area**

There are four projects in the upper Cumberland River basin of this service area, which is in the USACE Nashville District and EKSAP region with the EIU credit system (Figure 3).

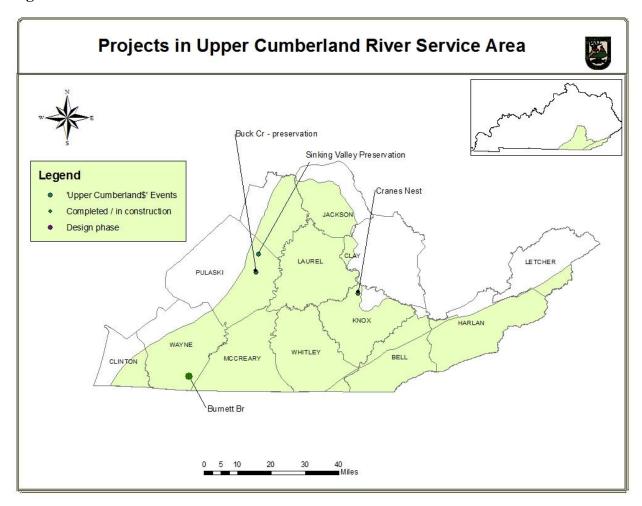
<u>Buck Creek Preservation</u>, <u>Pulaski County</u>. Updated property boundary surveys and signage were completed in FY11. A small parking area was constructed and the WMA was opened to the public.

Burnett Branch, Wayne & McCreary Counties. KDFWR partnered with KDOW Wild Rivers program to acquire property for preservation and restoration. FILO funds utilized only in stream riparian corridors, accounted for in deed restrictions applied at purchase. One tract excepted from FILO funds due to mineral severance. That tract carries same deed restriction s and retains potential for future mitigation if/when mineral ownership can be controlled.

<u>Cranes Nest Branch, Knox County.</u> In first year of monitoring. Monitoring completed and Year 1 report submitted in 2013.

<u>Sinking Valley, Pulaski County.</u> Mitigation Plan for 100% preservation finalized and accepted December 2013. Title required update for consideration of mineral severance/ownership. Purchase closing and deed restrictions expected early CY14.

Figure 3.



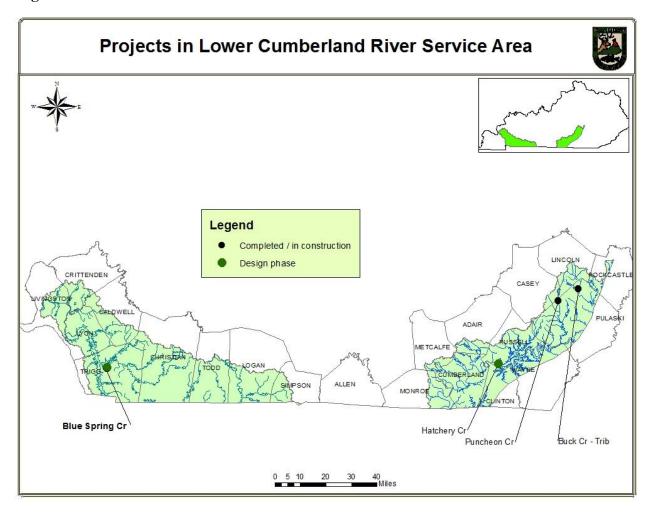
#### **Lower Cumberland River Service Area**

There are four projects in this service area, which is in the Nashville District and is in the KAP region using the AMU credit system. This service area has two distinct geographic areas in Kentucky, one in Western Kentucky and one in south-central Kentucky just up-and downstream of the Lake Cumberland area (Figure 4).

Blue Spring Creek, Trigg County. The project is entirely within Lake Barkley State Resort Park, with a substantial part of it on the park's golf course. The project was tentatively approved in 2013 on satisfactorily addressing several comments, which will be done early in 2014. Approval was obtained from Department of Parks officials prior to presenting it to the IRT. Details on preliminary design have been discussed in detail with golf course managers to ensure that the channel and easement will fit into the layout of the golf course. Design will begin early in 2014.

<u>Buck Creek Tributary, Pulaski County.</u> The fourth year of monitoring was completed and the report was submitted in 2013.

Figure 4.



<u>Hatchery Creek, Russell County.</u> A new contract for a design/build format was initiated in CY13. The new consultant/contractor was and continues to be involved with updating the plans and permits and working with multiple segments of USACE to coordinate construction activities. Groundbreaking is expected spring 2014.

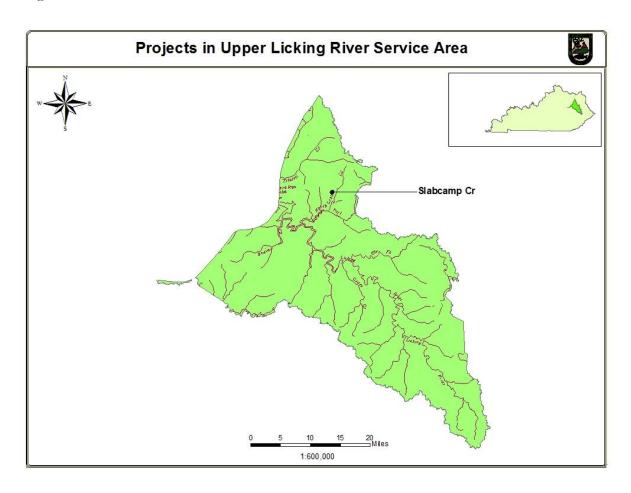
<u>Puncheon Creek</u>, <u>Pulaski County</u>. The design and permits were completed. Several easement revisions were required. Finalization of easement expected early 2014. Construction expected summer/fall 2014.

#### **Upper Licking River Service Area**

There is one project in this service area, which is in the USACE Louisville District in Magoffin, Morgan, and parts of Rowan and Menifee counties in the coal region with the EIU credit system (Figure 5).

<u>Slabcamp/Stonecoal Branch</u>, Rowan County. As-built survey and Year 1 monitoring report submitted in 2013.

Figure 5.



#### **Lower Licking River Service Area**

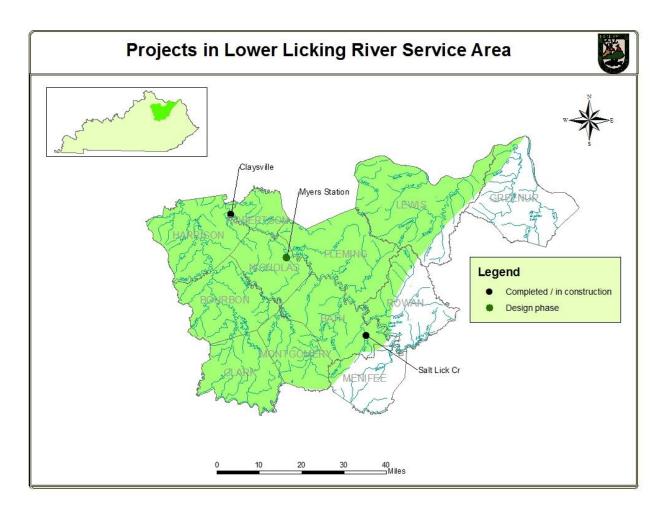
There are three projects in this service area, which is in the USACE Louisville District and the KAP region using the AMU credit system (Figure 6).

Claysville Recovery Land Site, Harrison County. In fifth year of monitoring phase.

Myers Station, Nicholas County. IRT site was conducted Dec 2012 and project approved in early 2013. The purchase of 468 acres was made by KDFWR. The project will protect and enhance the riparian corridor on more than a mile of the left bank of the Licking River. Additionally, several intermittent and ephemeral tributaries in Licking River watershed will be restored. The property is adjacent to and will become part of the Clay WMA owned by KDFWR.

<u>Salt Lick Creek, Bath County</u>. Year 1 monitoring completed and report was received in 2013. Additional planting to occur (under original warrantee) in early 2014.

Figure 6.



#### **Upper Kentucky River Service Area**

There are 10 active and one released projects in the Upper Kentucky River service area, which is in the USACE Louisville District and the EKSAP region using the EIU credit system (Figure 7).

<u>Balls Fork, Knott County.</u> This is the first project undertaken by the KDFWR in-lieu fee program and is in the long-term management phase. Supplemental planting will occur in early 2014.

<u>Bullskin Creek, Leslie County</u>. No action CY13. Project is in the long-term management phase. Supplemental planting will occur in early 2014.

<u>East Fork Indian Creek, Menifee County.</u> The project is in the Daniel Boone National Forest. Permanent protection will be provided by the U.S Forest Service (USFS) Management Plan. Several meetings with the design contractor, KDFWR and the USFS have been held to incorporate USFWS comments into design plans. Permits completed in 2013. Construction delayed for USFS to redo an MOA with KDFWR

and also resolve nearby planning issues not associated with the project. Construction should begin in fall 2014.

<u>Elisha Creek, Leslie County.</u> The project is on the USFS Daniel Boone National Forest. Permanent protection will be provided by the USFS Management Plan. Project scope was reduced to include only the Left Fork of Elisha Creek. Construction was completed in 2012, and Year 1 monitoring will be 2013. Year 1 monitoring report received in 2013.

Guy Cove, Breathitt County. The project is on Robinson Forest owned by the University of Kentucky (UK) in the Troublesome Creek watershed. This is a pilot project to rework the valley fill on a reclaimed mine site. The hollow fill is being reworked to more closely match the valley slope instead of the traditional fill required by mining regulations. In addition the reworked material is being "loose-dumped" per Reclamation Advisory Memorandum 124 that UK research has shown is more successful in restoring forest and hydrologic regimes. The Year 5 (2013) monitoring report delayed to include wetland delineation data to be collected in Spring 2014. Monitoring identified *Sericea lespedeza* present within the project area. Plan for addressing invasive species will be implemented in 2014.

<u>Red Lick, Estill County.</u> The fifth year monitoring year was performed by KDFWR in 2012 and the site I considered to be in long-term management phase. Supplemental planting will occur in early 2014.

Ross Creek, Lee County: Project adjacent to the Daniel Boone National Forest involving purchase of 533 acres, preservation, re-establishment, and rehabilitation of several miles of stream was approved by the IRT in December 2011. The McKinney Property was purchased in 2012 (533 acres) and design is underway. KDFWR is pursuing purchase of an additional 100 acres (+/-) at the mouth of Ross creek including both preservation and rehabilitation/re-establishment of stream habitat. Estate resolution delayed the purchase of adjacent property in 2013. Land Contract and survey to be initiated in 2014.

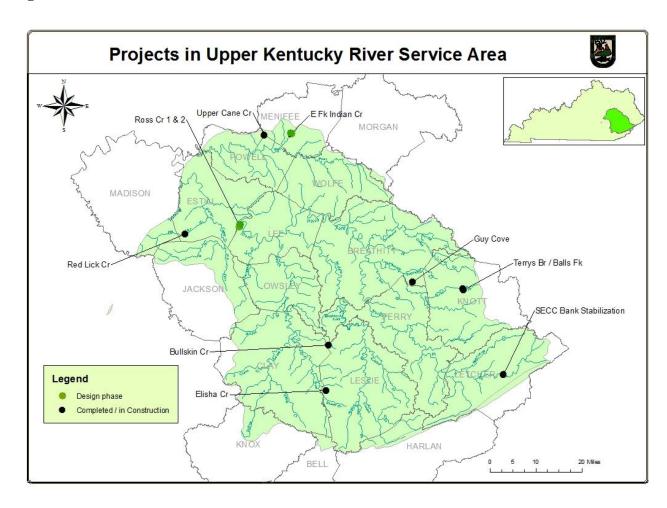
<u>Ross Creek II, Estill County</u>. Project approved and design began in 2013. The project adds 3,840 feet of preservation and 2,830 feet of restoration and 150 acres to the original Ross Cr project.

<u>SECC Bank Stabilization.</u>, <u>Letcher County.</u> The project is in long-term management phase. KDFWR is working with the school to initiate a supplemental planting for educational purposes and aesthetics.

<u>Terrys Branch, Knott County</u>. The project is an extension of the Ball's Fork project mentioned above in the Troublesome Creek watershed and is in the long-term management phase. KDFWR has successfully completed round 1 of repairs on log vanes at Terry's Branch. Round 2 of repairs and a final planting are scheduled for 2014. Aside from the vanes, habitat has been productive at Terry's Branch and an improved fish assemblage has resulted.

<u>Upper Cane Creek, Menifee County.</u> The conservation easement was surveyed and submitted to Real Properties for approval. Construction is planned for FY14. In addition, KDFWR is working with the county judge to reduce the scope of road relocation associated with the project.

Figure 7.



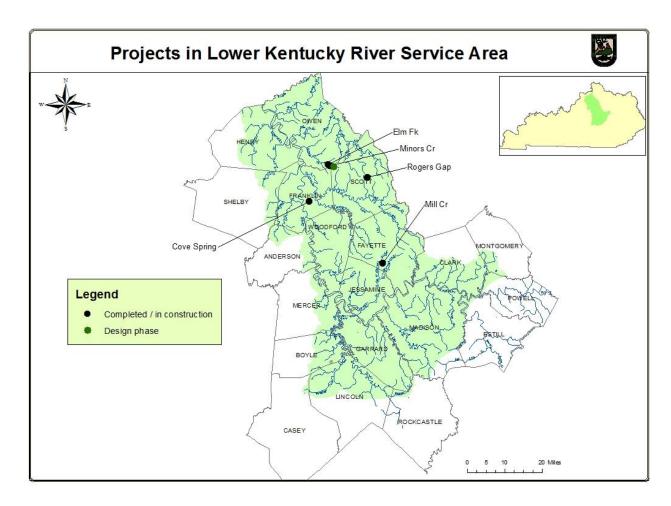
#### **Lower Kentucky River Service Area**

There are five projects in this service area, which is in the USACE Louisville District and KAP region with AMU credit system in the (Figure 8).

Cove Spring, Franklin County. This project is in Cove Spring Park owned by the City of Frankfort and is accessible to the public. Project construction began in 2012, and much of the project has been completed. Construction will be completed and the site will be planted in spring 2014. KDFWR is working with KDOW and USACE to develop an alternate planting plan in the wetland area of penitentiary branch because of beaver activity. The project has been of interest to educational entities and the public. Year 1 of monitoring will begin in 2014.

<u>Elm Fork, Owen County</u>. The project is on Kleber WMA and is accessible to the public. Construction began in June, 2013. Construction is going well but the schedule was delayed by unusually wet weather, and construction is now slated to be completed in the spring of 2014.

Figure 8.



Mill Creek, Fayette County. The project is on Mill Creek Elementary School land and provided stream and wetland restoration and ongoing outdoor classroom learning opportunities. Year four of monitoring was completed in 2013 and the report was submitted. The school had expanded its campus on the property.

Minors Creek, Owen County. The IRT site visit and project approval occurred in 2013. The purchase of the project site (309 acre former cattle farm) by KDFWR will be finalized early in 2014. The purchase will allow Minors Creek and several of its tributaries to be restored, which will significantly improve and permanently protect Minors Creek and its watershed that is directly upstream of the existing project on Elm Fork and Minors Creek.

Roger's Gap, Scott County. This project included the acquisition of 2,500 acres containing approximately 28 miles of stream, representing ephemeral, intermittent, and perennial flow regimes. The property was acquired in December 2011 utilizing funds from the Kentucky Wetland and Stream Mitigation Program and department-contributed federal grant money specifically designated for land acquisition. Restoration or preservation has been proposed for all streams on the property, which will be protected by permanent deed restrictions approved by the USACE. The remainder of the property will be managed as a state-owned wildlife management area and will be open to the public. Required 401 and 404 permits were received in 2013 and construction commenced.

#### **Salt River Service Area**

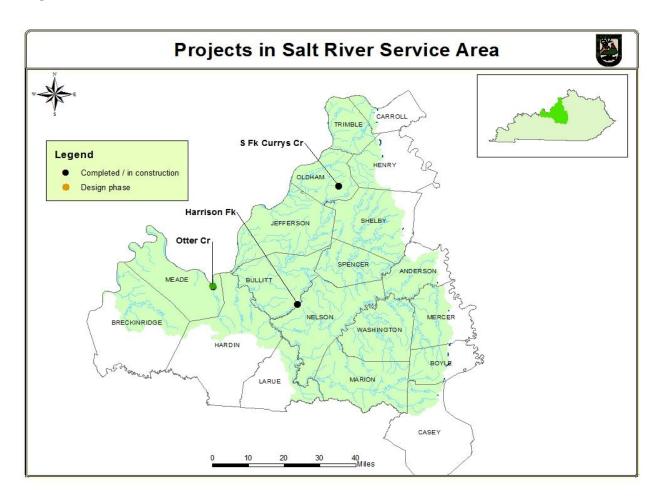
There are three projects in this service area, which is entirely within the USACE Louisville District and KAP region using the AMU credit system (Figure 9).

<u>Harrison Fork, Nelson County.</u> University of Louisville is working on the project design. A design funding increase was approved in FY10 for extra design work to avoid a gas line, groundwater monitoring, and 2-D hydrologic modeling. Bernheim and KDFWR/Real Properties are negotiating the project easement.

Otter Creek, Meade County. The project was tentatively approved in 2013, but allocation of project funds will not be made until FY14. FILO funded a study to assure that the cost was feasible. This project has the largest watershed of any FILO project, just over 100 mi<sup>2</sup>. Because of its size, good water quality, and significant physical degradation, the potential exists for creating outstanding habitat that will support an excellent fishery and canoe route. Design should begin early in 2014.

<u>South Fork Currys Fork, Oldham County.</u> The project was constructed in 2012. 2013 will be the first year of monitoring. The as-built survey and Year 1 monitoring report were received in 2013.

Figure 9.



#### **Green River Service Area**

There are five active and one released projects in this service area, which is within the USACE Louisville District and KAP region using the AMU credit system (Figure 10).

<u>Boyds Creek, Barren County</u>. This project is on private land in the upper watershed of this tributary of Skaggs Creek. It will restore 3,235 feet of the Boyds Creek and five small tributaries.

<u>Eagle Creek Tributary, Union County.</u> The oil/gas lease easement restrictions agreement for permanent protection of the site from mineral extraction was signed early in 2012. Design was nearly complete in mid-2013 but was revised based on a decision by the USACE and the KDOW to debit channels abandoned with the mitigation activity of re-establishment. The revised design (that will maintain the old channels as ephemeral flow type) and Mitigation Plan will be re-submitted early in 2014. Permits will be obtained and construction should begin in November 2014.

<u>Forestland Group Tract, Union County.</u> Project approval was granted in FY10. Land acquisition for permanent protection of the site is complete. The second (Crittenden County) tract encompassing the southern boundary and riparian buffer zone of the Tradewater River has been purchased. FILO contributed funds associated with preservation of the Tradewater River corridor, which were applied with the second phase.

Goose Creek, Casey County. This project is on a 200-acre cattle farm includes 4,763 feet of Goose Creek and 12,855 feet of tributaries. The restoration will include creating diverse habitat in a straight, homogenous reach of larger stream and re-establishment of habitat in surrounding tributaries, and will result in permanent cattle exclusion from all restoration streams on the property.

<u>Haney Fork, Butler County.</u> No action in 2013. This project is complete and is in the long-term management phase.

<u>Trammel Creek, Allen County.</u> The project has experienced some minor bank scour and loss of vegetation. Project repairs were completed in summer 2012 and additional tree planting was completed in November 2012. The project will be entering Year 5 monitoring in 2014. The 2013 report reflects the success of the repair efforts and that the project is trending toward success criteria goals.

Figure 10.



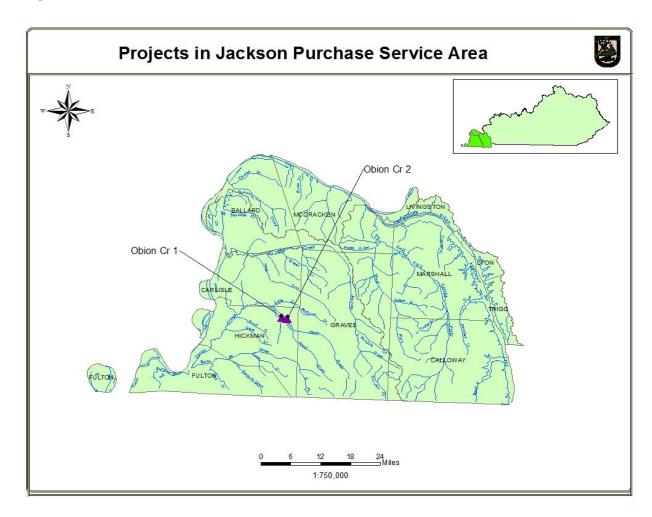
### Purchase Service Area (Tennessee and Mississippi River Basins)

There are two projects in the Purchase service area, which is within the USACE Memphis District and KAP region using the AMU credit system (Figure 11). In 2013, The Memphis USACE disapproved a wetland enhancement project that included purchase of a 26-acre tract in Hickman County adjacent to the Obion Creek WMA.

Obion Creek #1, Hickman County. No action in 2013. This project is in the long-term management phase.

Obion Creek #2, Hickman County. Construction by the University of Louisville's Stream Institute and Douglas Amphibious is progressing. The project is in its second phase of construction which includes repairing any sections and the placement of any structures. The construction of the bypass channel upstream of the debris jam is entering the permitting phase.

Figure 11.



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Kentucky Department of Fish and Wildlife Resources. 2012. Wetland and Stream Fee-In-Lieu of Mitigation Program Report for Period July 1, 2011 through December 31, 2011.

U.S. Army Corps of Engineers. 2011. Modification – Number One of the Agreement Concerning In-Lieu Mitigation Fees between U.S. Army Corps of Engineers and Kentucky Department of Fish and Wildlife Resources. LRL-2010-325.

U.S. Army Corps of Engineers. 2008. 33 CFR Chapter II Part 332. Compensatory Mitigation for Losses of Aquatic Resources. Federal Register Vol. 73, No. 70, April 10, 2008.

## Appendix A

CY13 Credit Sales, Costs, and Balances

Service Area	Corps 404ID#	Date of Payment	Credits Sold		st per Jnit	Status	Credit Balance
	LRL-2011-189	03/15/13	33.00	\$	648		
	LRL-2010-1027	04/02/13	111.00	\$	651	CY13 Beginning Credit Balance	214,520.72
Big Sandy	LRL-2011-258	06/19/13	168.00	\$	650	CY13 Credits Sold	5,707.60
Stream (EIU)	LRL-2011-67	09/17/13	3,591.00	\$	650	CY13 Ending Advanced Credit	
	LRL-2009-1260	10/23/13	1,804.60	\$	650	Balance	208,813.12
	CY2013 total	credits sold	5,707.60				
	LRL-2010-1143	05/13/13	68.00	\$	610	CV/12 De signing	
	LRL-2007-00439	05/20/13	117.63	\$	610	CY13 Beginning Credit Balance	237,650.14
Upper Kentucky	LRL-2001-00340	08/29/13	37.00	\$	610	CY13 Credits Sold	999.13
Stream (EIU)	LRL-2013-018	10/29/13	281.50	\$	610	CY13 Ending Advanced Credit	000.054.04
	LRL-2013-453	11/01/13	495.00	\$	610	Balance	236,651.01
	CY2013 total	credits sold	999.13				
NO CY2013 sal						CY13 Beginning	000 004 00
Upper Licking Stream (EIU)	CY2013 total	CY2013 total credits sold				Credit Balance CY13 Ending Advanced Credit Balance	238,904.00
	LRN-2012-00464	08/15/13	49.50	\$	610	CY13 Beginning Credit Balance	232,863.81
Upper Cumberland						CY13 Credits Sold	49.50
Stream (EIU)	CY2013 total	credits sold	49.50			CY13 Ending Advanced Credit Balance	232,814.31
	LDL 0004 455	00/10/15		•	2.15	CY13 Beginning	
	LRL-2004-402-ncc	06/19/13	22.50	\$	240	Credit Balance	239,193.00
Lower Kentucky Stream (AMU)	LRL-2012-455- mdh	07/10/13	4,666.20	\$	240	CY13 Credits Sold	14,654.20
Sucani (Alvio)	LRL-2012-134	12/03/13	9,965.50	\$ I	240	CY13 Ending Advanced Credit	224,538.80
	CY2013 total	credits sold	14,654.20			Balance	227,000.00
	NO CY2013 sales					CY13 Beginning Credit Balance	217,569.00
Lower Licking Stream (AMU)	CY2013 total credits sol		0			CY13 Ending Advanced Credit Balance	217,569.00
Lower	LRN-2011-00541	03/28/13	4.550.01	\$	240	CY13 Beginning	004.400.60
Cumberland Stream (AMU)	LRL-2012-00797	07/02/13	1,550.01	\$	240	Credit Balance CY13 Credits Sold	224,130.00

			367.70	•			1,917.71	
	CY2013 total o	credits sold	1,917.71			CY13 Ending Advanced Credit Balance	222,212.29	
	LRL-2012-149-let	05/02/13	792.00	\$	240	CY13 Beginning Credit Balance	234,778.85	
	LRL-2011-52-mdh	05/06/13	1,683.00	\$	240	CY13 Credits Sold	4,928.00	
Salt River Stream (AMU)	LRL-2013-348	09/03/13	693.00	\$	240	CY13 Ending Advanced Credit		
	LRL-2012-795	12/04/13	1,760.00	\$	240	Balance	229,850.85	
	CY2013 total of	credits sold	4,928.00					
	1.51.0040.000					0)(10 D : :		
	LRL-2012-899- dah	04/23/13	890.00	\$	240	CY13 Beginning Credit Balance	215,024.40	
Green River Stream (AMU)	LRL-2005-1509-a	05/20/13	731.85	\$	240	CY13 Credits Sold	1,621.88	
, ,	CY2013 total o	credits sold	1,621.85			CY13 Ending Advanced Credit Balance	213,402.53	
Jackson Purchase Stream	NO CY2013 sales			1		CY13 Beginning Credit Balance	239,981.00	
(AMU)	CY2013 total o	credits sold	0			CY13 Ending Advanced Credit Balance	239,981.00	
	LRL-2009-1260	10/23/13	0.024	\$	30,000	CY13 Beginning Credit Balance	94.040	
Big Sandy Wetland (AMU)				1		CY13 Credits Sold	0.024	
,	CY2013 total of	credits sold	0.024			CY13 Ending Advanced Credit Balance	94.016	
	LRL-2012-455- mdh	07/10/13	3.170	\$	30,000	CY13 Beginning Credit Balance	97.168	
Lower Kentucky	man		3.170			CY13 Credits Sold	3.170	
Wetland (AMU)	CY2013 total o	credits sold	3.170			CY13 Ending Advanced Credit Balance	93.998	
Lower Licking	NO CY2013 sales			1		CY13 Beginning Credit Balance	99.020	
Wetland (AMU)	CY2013 total of	credits sold	0			CY13 Ending Advanced Credit Balance	99.020	
U	LRN-2012-00464	08/15/13	3.360	\$	30,000	CY13 Beginning Credit Balance	97.369	
Upper Cumberland				•		CY13 Credits Sold	3.360	
Wetland (AMU)	CY2013 total o	credits sold	3.360			CY13 Ending Advanced Credit Balance	94.009	

	LRL-2011-375- cmh	05/16/13	1.900	\$ 30,000	CY13 Beginning Credit Balance	97.460
Salt River					CY13 Credits Sold	1.900
Wetland (AMU)	CY2013 total	1.900		CY13 Ending Advanced Credit Balance	95.560	
	LRL-2005-1509-a	05/20/13	3.312	\$ 30,000	CY13 Beginning Credit Balance	182.276
Green River	LRL-2013-159	11/25/13	0.430	\$ 30,000	CY13 Credits Sold	3.814
Wetland (AMU)	LRL-2013-070	12/11/13	0.072	\$ 30,000	CY13 Ending Advanced Credit	
	CY2013 total	credits sold	3.814		Balance	178.462
	LRN-2011-00594	02/25/13	0.820	\$ 36,000	CY13 Beginning Credit Balance	197.700
Jackson Purchase	LRL-2013-206- sew	05/13/13	3.000	\$ 30,000	CY13 Credits Sold	0.820
Wetland (AMU)	LRL-2013-206- sew	07/15/13	(3.000)	\$ 30,000	CY13 Ending Advanced Credit	
	CY2013 total	credits sold	0.820		Balance	196.880

Appendix B

Project Data

			AMU	Area					
Basin/Stream	Туре	<u>County</u>	USACE District	404 Permit #	Project Cost	<u>Length</u> (ft)	Credits	Cost/ft	Cost/credit
Big Sandy River									
Monitoring Phase									
Kinniconnick Creek	Rehabilitation Enhancement	Lewis	Louisville	LRL-2007-409-pgj	\$2,061,600	6,782	10,308	\$304	\$200
Lower Cumberland River									
Design Phase									
Blue Spring Creek	Rehabilitation Enhancement	Trigg	Nashville	LRN-2013-00776	\$5,050,028	21,890	27,029	\$231	\$187
Hatchery Creek	Re-establishment	Russell	Nashville	LRN-2010-00444	\$1,863,500	6,150	19,320	\$303	\$96
Puncheon Creek	Rehabilitation Enhancement	Pulaski	Nashville		\$3,000,000	11,760	17,765	\$255	\$169
<b>Monitoring Phase</b>									
Buck Creek Tributary	Rehabilitation Enhancement	Pulaski	Nashville		\$236,750	1,221	1,262	\$194	\$188
Green River									
Preservation Project									
Forestland Gr Tract (Stream)	Preservation Enhancement	Union	Louisville		\$711,223	26,320	7,484	\$28	\$100
Forestland Gr Tract (Wetland)	Restoration Enhancement	Union	Louisville		\$33,949	5.6 ac	5.6		\$6,061
Design Phase									
Boyd Creek	Rehabilitation Re-establishment	Barren	Louisville	LRL-2013-545	\$487,200	3235	2,538	\$151	\$192
Eagle Cr Tributary (Stream)	Rehabilitation Enhancement	Union	Louisville	LRL2012-716 pgj	\$800,000	7,750	20,534	\$103	\$39
Eagle Cr Tributary (Wetland)	Establishment	Union	Louisville	LRL2012-716 pgj	\$200,000	25.54 ac	25.54		\$7,831
Goose Creek	Preservation Enhancement Rehabilitation Re-establishment	Casey	Louisville	LRL-2012-646-pgj	\$3,124,400	18,706	16,542	\$167	\$189

			AMU A	rea (con't)					
Basin/Stream	Туре	County	USACE District	404 Permit #	Project Cost	Length (ft)	Credits	Cost/ft	Cost/credit
Monitoring Phase									
Trammel Creek	Rehabilitation Enhancement	Allen	Louisville	LRL-2008-936-pgj	\$712,500	3,800	6,314	\$188	\$113
Long Term Management Phase									
Haney Fork Watershed No. 2	Rehabilitation Enhancement	Butler	Louisville	LRL-2004-01363	\$246,715	4,330	3,248	\$57	\$76
Purchase									
Construction Phase									
Obion Creek II	Rehabilitation Enhancement	Hickman	Memphis	MVM-2010-074	\$780,976	23,000	69,000	\$34	\$11
Long Term Management Phase									
Obion Creek	Rehabilitation Enhancement	Hickman	Memphis	200300263	\$71,013	5,684	17,052	\$12	\$4
<b>Terminated Project</b>									
East Fork Clarks River		Marshall	Memphis		\$38,528				
Lower Kentucky River									
Design Phase									
Minors Creek	Preservation Enhancement Rehabilitation Re-establishment	Owen	Louisville	LRL-2013-91-pgj	\$3,507,000	21,390	20,343	\$164	\$172
Construction Phase					+-//			7-51	7-1-
Elm Fork	Rehabilitation Enhancement	Owen	Louisville	LRL 2012-263 pgj	\$1,768,000	7,600	11,100	\$233	\$159
Rogers Gap	Preservation Enhancement Rehabilitation Re-establishment	Scott	Louisville	LRL-2013-134-jpg	\$10,100,000	170,856	142,149	\$59	\$71
Monitoring Phase									
Cove Spring (Stream)	Rehabilitation Enhancement	Franklin	Louisville	LRL 2009 614 pgj	\$1,237,543	7,001	9,236	\$177	\$134
Cove Spring (Wetland)	Establishment	Franklin	Louisville	LRL 2009 614 pgj	\$257,457	20.64 ac	14		\$17,784
Mill Creek	Rehabilitation Rehabilitation	Fayette	Louisville	LRL-2009-611-pgj	\$182,050	750	682	\$243	\$267

			AMU A	rea (cont)					
Basin/Stream	<u>Type</u>	County	USACE District	404 Permit #	Project Cost	<u>Length</u> (ft)	Credits	Cost/ft	Cost/credit
Lower Licking River									
Design Phase									
Myers Station	Rehabilitation Re-establishment Buffer Enhance Preservation	Nicholas	Louisville	LRL-2012-637-pgj	\$1,885,950	23,650	10,992	\$80	\$172
Monitoring Phase									
Claysville Recovery Land Aq Site	Enhancement	Harrison	Louisville	LRL-2008-644-pgj	\$271,500	2,600	2,554	\$104	\$106
Salt Lick	Rehabilitation Enhancement	Bath	Louisville	LRL-2011-00891	\$1,647,800	5500	8,250	\$300	\$200
Salt River									
Conceptual Phase									
Otter Creek (feasibility study only)	Rehabilitation	Meade	Louisville	LRL-2013-425-pg	\$20,000	12,530	17,575		
Design Phase									
Harrison Fork	Rehabilitation Enhancement	Nelson	Louisville	tba	\$1,700,000	8,900	12,179	\$191	\$140
Monitoring Phase									
South Fork of Curry's Fork	Rehabilitation Enhancement	Oldham	Louisville	LRL-2009-98-pgj	\$978,900	4,753	4,905	\$206	\$200
Total Stream	24	-			\$42,974,582	406,158	458,407		
Total Wetland	3				\$491,406	51.78	45.14		
Average Stream					\$1,790,608	16,923	19,100	\$106	\$94
Average Wetland					\$163,802	22.08 ac	15.05		\$10,886

			EIL	J Area					
Basin/Stream	Type	County	<u>USACE</u> <u>District</u>	404 Permit #	Project Cost	<u>Length</u> (ft)	Credits	Cost/ft	Cost/credit
Big Sandy River									
Design Phase									
Barrett Creek	Rehabilitation	Carter	Louisville	LRL-2012-635-pgj	1,719,538	8,878	3,463	179	458
Brushy Creek Repair 3		Greenup	Louisville		\$550,000				
East Fork Little Sandy #5	Rehabilitation Enhancement	Lawrence	Louisville		\$775,000	2,955	1,360	\$262	\$570
Laurel Creek Gorge #2	Rehabilitation Enhancement	Elliott	Louisville	LRL-2012-478-pgj	\$979,662	5,350	1,768	\$175	\$458
Mart Whitt Fork	Enhancement Preservation	Elliott	Louisville	LRL-2013-598-pgj	\$1,561,600	18,373	3,141	\$85	\$497
Old Trace Creek	Rehabilitation Re-establishment Enhancement Preservation	Lewis	Louisville	LRL-2013-336-pgj	\$3,534,888	21,124	7,133	\$167	\$496
Schultz Creek	Rehabilitation Enhancement	Greenup	Louisville	2009-806	\$739,795	2,900	1,305	\$255	\$567
White Oak Creek	Rehabilitation	Greenup	Louisville	LRL-2010-787-pgj	\$1,165,830	6,134	2,415	\$190	\$483
Whites Creek	Rehabilitation Re-establishment	Boyd	Louisville	LRL-2012-634-pgj	\$1,583,000	8,355	3,312	\$189	\$458
Monitoring									
Bolts Fork	Rehabilitation Enhancement	Boyd	Louisville	LRL-2010-00698	\$1,212,923	6,760	2,765	\$179	\$439
Brushy Creek	Rehabilitation Enhancement	Greenup	Louisville	200400931	\$799,400	4,755	2,140	\$168	\$374
Brushy Creek Repair		Greenup	Louisville	LRL-2008-902-jct	\$115,575	1,027	-	\$113	-
Brushy Creek Repair 2		Greenup	Louisville	LRL-2009-1074-pgj	\$118,900	830	-	\$143	-
East Fork Little Sandy #2	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2009-332-pgj	\$2,137,548	12,598	5,402	\$170	\$396
East Fork Little Sandy #3	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2008-1082-pgj	\$1,616,400	9,778	4,376	\$165	\$369
East Fork Little Sandy #4	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2009-123-pgj	\$817,700	3,159	1,195	\$259	\$684
Locust Creek	Rehabilitation Enhancement	Lawrence	Louisville	LRL-2008-1249-pgj	\$688,315	3,550	1,338	\$194	\$514

			EIU Ar	ea (cont)					
Basin/Stream	Туре	County	USACE District	404 Permit #	Project Cost	Length (ft)	Credits	Cost/ft	Cost/credit
Middle Creek	Rehabilitation Enhancement	Floyd	Louisville	LRL-2006-1256-pgj	\$858,460	9,180	2,214	\$94	\$388
Upper Laurel Creek	Enhancement	Lawrence	Louisville	200500901	\$697,500	3,000	1,350	\$233	\$517
Long Term Management Phase									
East Fork Little Sandy #1	Rehabilitation Enhancement	Lawrence	Louisville	200401120	\$332,893	1,650	742	\$202	\$396
Left Fork of Trace Creek	Rehabilitation Enhancement	Boyd	Louisville	2006-00160	\$269,200	1,300	585	\$207	\$460
<b>Preservation Project</b>			Louisville						
Laurel Creek Gorge	Preservation	Elliott	Louisville	-	\$1,353,625	83,059	7,725	\$16	\$175
Terminated Project									
Laurel Creek Tributary		Elliott	Louisville		\$155,858				
Ben Willim Branch		Lewis	Lousville		\$0				
Cat Fork		Lawrence	Lousville		\$0				
Keys Creek		Boyd	Louisville		0		-	-	-
Pigeon Roost Creek		Boyd	Louisville		0		-	-	-
<b>Upper Cumberland River</b>		-		-	-		-	-	-
Design Phase		-		-	-		-	=	-
Burnett Branch	Re-establishment Enhancement Preservation	Wayne McCreary	Nashville	LRN-2013-00116	\$1,927,600	37,688	7,497	<u>\$51</u>	<u>\$257</u>
Monitoring Phase									
Crane's Nest Branch	Rehabilitation Enhancement	Knox	Nashville	2009-01424	\$527,820	2,275	1,078	\$232	\$490
Preservation Project									
Buck Creek	Preservation	Pulaski	Nashville		\$1,667,413	56,502	5,255	\$35	\$381
Sinking Valley	Preservation	Pulaski	Nashville	LRN-2012-00326	\$1,885,950	43,131	4,191	\$44	\$450
Upper Kentucky River									
Design Phase									
East Fork Indian Creek	Rehabilitation	Menifee	Louisville	LRL-2012-273	\$1,042,910	4,299	2,160	\$243	\$483

			EIU Are	ea (cont)						
Basin/Stream	Type	County	USACE District	404 Permit #	Project Cost	Length (ft)	Credits	Cost/ft	Cost/credit	
Ross Creek	Preservation Re-establishment Rehabilitation	Lee	Louisville	LRL-2013-143	\$3,538,760	20,165	7,338	\$175	\$482	
Ross Creek II	Preservation Re-establishment Rehabilitation	Lee	Louisville	LRL-2013-143	\$984,000	6,672	1,936	\$147	\$508	
Upper Cane Creek	Rehabilitation Enhancement	Menifee	Louisville	LRL-2009-433-pgj	\$1,055,475	5,902	1,297	\$179	\$814	
Monitoring Phase			Louisville							
Laurel Fork of Troublesome Cr	Rehabilitation	Breathitt	Louisville	LRL-2007-615	\$1,576,062	5,515	2,200	\$318	\$228	
Elisha Creek-USFS	Rehabilitation Enhancement	Leslie	Louisville	LRL-2011-00404	\$788,607	4,067	1,912	\$194	\$412	
Long Term Management Phase										
Balls Fork	Rehabilitation	Knott	Louisville		\$85,000	803	270	\$106	\$315	
Bullskin Creek	Rehabilitation	Leslie	Louisville	200500205-pgj	\$208,700	1,823	729	\$114	\$286	
Red Lick Creek	Rehabilitation Enhancement	Estill	Louisville		\$100,483	1,860	837	\$54	\$120	
SECC Bank Stabilization	Rehabilitation Enhancement	Letcher	Louisville	NA	\$61,888	821	82	\$75	\$755	
Terrys Branch	Rehabilitation Enhancement	Knott	Louisville	200500205	\$734,000	2,992	1,227	\$245	\$598	
Terminated Project										
North Fork Kentucky River	Enhancement	Perry	Louisville	NA	\$30,000	3,538	0	\$8		
Frozen Creek		Breathitt	Louisville		\$150,220					
Red Lick #2		Estill	Louisville		\$750					
Sand Lick Creek			Louisville		\$0					
Upper Licking River										
Monitoring Phase										
Slabcamp Creek-Stonecoal Branch	Re-establishment	Rowan	Louisville	LRL-2009-762-pgj	\$1,900,000	14,180	9,378	\$134	\$203	
Total <sup>a</sup>	35				\$42,049,248	426,948	101,116			
Average <sup>a</sup>					\$1,201,407	12,119	2,889	\$98	\$416	

<sup>&</sup>lt;sup>a</sup>Total cost includes expenses incurred for terminated projects, but total projects, total length, total credits, and average figures don't include the projects since they were terminated prior to construction

# Appendix C

# Compliance Information

Г		I			I				
<u>Project</u>	404 Permit Number/Date <u>Authorized</u>	401PM/ KDFWR PM	Date Concept Plan/Pre- Application <u>Site Visit</u>	Approval Date of Design Funds/Const <u>Funds</u>	Project Completion <u>Date (FY)</u>	First/Final Monitoring <u>Year (FY)</u>	Most Recent Monitoring Report Rec'd	Mitigation Status	<u>Comments/Issues</u>
BIG SANDY RIVER	LDL 2010 00500	Districtly		0/20/00					
Bolts Fork	LRL-2010-00698 5/13/11	Bicknell/ Mulhall	Jun 2008	8/20/08 12/8/10	Jan 2014	2014/2018	_	Open	In Monitoring (Year 1:2014)
BOILS I OIK	LRH-2004-00931	Bicknell/	Juli 2008	5/4/04	Jan 2014	2014/2018	_	Ореп	Project failure; Approved for bank stabilization.
Brushy Creek	7/22/04	Lewis	Apr 2004	2/2/05	2006	2007		Open	monitoring suspended; repair ongoing
	LRL-2009-1074	Bicknell/	1	5/13/09				- 1	5 12 B 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Brushy Creek Stabilization 2	10/29/09	Lewis	NA	5/13/09	Jan 2010	-	-	-	No monitoring required
East Fork Little Sandy #1	LRH-2004-01120 4/11/04	Bicknell/ Mulhall	Feb 2003	2/11/03 11/12/05	Jan 2007	2007/2011	-	Released	No monitoring reports required. Project released from monitoring in letter dated 5-28-13. Project will be periodically monitored for easement encroachments and appropriate measures taken if needed.
	LRL-2009-332-pgj	Bicknell/		2/21/07			Year 3		
East Fork Little Sandy #2	10/29/09	Mulhall	Jan 2007	9/16/09	Feb 2011	2011/2015	(2013)	Open	In Monitoring (Year 4:2014)
Fact Fork Little Candy #2	LRL-2008-1082-pg 5/7/09	Bicknell/ Mulhall	A = 2007	6/25/07 2/18/09	2011	2011/2015	Year 3 (2013)	Onon	In Manitoring (Vans 4:2014)
East Fork Little Sandy #3	LRL-2009-123-pgj	Bicknell/	Apr 2007	10/17/07	2011	2011/2015	(2013) Year 3	Open	In Monitoring (Year 4:2014)
East Fork Little Sandy #4	6/12/09	Mulhall	Sept 2007	3/11/09	2010	2011/2015	(2013)	Open	In Monitoring (Year 4:2014)
	, , , , ,	Bicknell/		2/18/09		,	( /	- 1	, ,
East Fork Little Sandy #5	LRL-2011-00456	Lewis	Dec 2008	12/8/10	-	-	-	-	Property and permanent protection issues not resolved
Kinniconnick Creek	LRL-2007-409-pgj 3/27/08	Bicknell/ Mulhall	Jul 2004	7/14/04 3/1/08	2009	2009/2013	Year 5 (2013)	Open	Repairs commenced Nov 2013 and expect to be completed in early 2014. Have discussed releasing sections of Lower Indian and Kinniconick Creek from monitoring, and continue to monitor Upper Indian (upstream of low water crossing) where majority of repair work occurred.
		Tewksbury/		8/15/07					
Laurel Creek Gorge	NA		Jul 2007	NA	2010	NA	NA	NA	Preservation only, no monitoring required
Left Fork of Trace Creek	2006-00160 7/10/06	Bicknell/ Mulhall	Sept 2004	1/12/05 4/19/06	2007	2007/2011	Year 5 (2011)	Released	Repairs and maintenance completed in Nov 2013. Project released in letter (2-6-2014). Project will be periodically monitored for easement encroachments and appropriate measures taken if needed.
Land Const.	LDL 2000 1210	Bicknell/	1 2005	6/24/05	D 2010	2010/2016	Year 4	0.	La Marchada (M. 15004 N
Locust Creek	LRL-2008-1249-pgj	Mulhall	Jun 2005	9/30/09	Dec 2010	2010/2014	(2013)	Open	In Monitoring (Year 5:2014)
Middle Creek	LRL-2006-1256-pgj 10/31/07	Bicknell/ Mulhall	Apr 2004	7/14/04 6/25/07	2008	2008/2012	Year 5 (2012)	Open	Monitoring period extended. Repair and maintenance tasks to occur during 2013-2014 including easement boundary marking, invasive plant control and supplemental native planting.
	LRL-2009-806	Tewksbury/		10/17/07				-	
Schultz Creek	5/24/10	Lewis	Sept 2007	3/17/10	-	-	-	-	Property ownership issues

									Monitoring period extended. Maintenance tasks to
	200500901	Bicknell/		7/13/03			Year 5		occur in 2014 include invasive plant control and
Upper Laurel Creek	3/2/06	Mulhall	Jun 2003	10/5/05	2008	2009/2013	(2013)	Open	supplemental native planting
CUMBERLAND RIVER									
		Watt/							
Buck Creek	NA	Mowrey	Apr 2009	5/13/2009	2010	NA	NA	NA	Preservation only, no monitoring required
	NRL-2007-0115-1	Watt/		6/1/07			Year 4		
Buck Creek Tributary	12/29/07	Mulhall	July 2006	6/25/07	Jan 2010	2011/2015	(2013)	Open	In Monitoring (Year 5:2014)
	2009-01424	Watt/		4/16/08			Year 1		
Crane's Nest Branch	3/1/2010	Mulhall	Feb 2008	11/16/09	2012	2013/2017	(2013)	Open	In Monitoring (Year2:2014)
		Watt/	_						
Hatchery Creek	-	Mowrey	July 2009	8/17/2010	-	2014/2018	-	-	In Design
		Watt/		8/20/2008					
Puncheon Creek	-	Mowrey	May 2008		-	-	-	-	In Design
LICKING RIVER									
	LRL-2008-644-pgj	Watt/		10/5/05				_	
Claysville Recovery Land	6/3/09	Mulhall	Apr 2006	3/16/08	2010	2010/2014	-	Open	Project in monitoring
				0 /0 0 /0 0					Project in monitoring (Year2-2014). Replanting to occur
Called all Const.	LRL-2011-00891	Watt/	1 . 2000	8/20/08	2012	2042/2047	Year 1	0	in early 2014. Covered under original planting
Salt Lick Creek		Mulhall	Jun 2008	8/20/08	2013	2013/2017	(2013)	Open	warranty.
Clabarana Car Standard Ba	LRL-2009-762-pgj	Watt/	A 2005	10/5/05	2012	2012/2017	Year 1	0	In Manifestine (Venus 2, 2014)
Slabcamp C r -Stonecoal Br	10/30/09;8/12/10	Mulhall	Aug 2005	5/13/09	2013	2013/2017	(2013)	Open	In Monitoring (Year2:2014)
KENTUCKY RIVER									
	LRL-2002-01447	Fry/		21.122			Year 7	_	
Balls Fork	9/26/06	Mulhall	-	2/1/02	Dec 2005	2007/2012	(2012)	Open	Supplemental planting to occur in 2014
Dalam (Danam Can)	LDL 2042 424'	Fry/	NA 2011	A 1 2044					La Davisa (Carata atia a / Davisa David Davisat)
Beluga (Rogers Gap)	LRL-2013-134.pgj LRL-2005-0205-pgj	Mulhall	Mar 2011	April 2011 2/11/03	-	-	-	-	In Design/Construction (Design-Build Project)
Bullskin Creek	2/22/04	Fry/ Mulhall	Feb 2003	2/11/03 2/6/04	Sept 2005	_	_	Open	Supplemental planting to occur in 2014
Builskiii Creek	LRL- 2009-614-pgj	Fry/	Feb 2005	10/17/07	3ept 2005	-	-	Open	In monitoring (Year1:2014). Final planting completed 2-
Cove Spring	1/7/11	Mulhall	June 2007	5/13/09	Feb 2014	2014/2018	-	Open	20-2014.
Cove Spring	1///11	Fry/	Julie 2007	3/13/09	160 2014	2014/2018	<u> </u>	Ореп	20-2014.
East Fork Indian Creek	LRL-2012-273-pgj	Lewis	Dec 2007	4/16/08	_	_	_	Open	In Design
East Fork malari creek	ENE 2012 273 PBJ	Fry/	Dec 2007	6/1/06			Year 1	Орен	in besign
Elisha Creek	LRL-2011-00404	Mulhall		2/18/09	2013	2013/2017	(2013)	Open	In Monitoring (Year2:2014)
znona Greek	2.1.2 2022 00 10 1	Fry/		3/17/10	2010	2013/2017	(2020)	ope	III Montos III g (1641212021)
Elm Fork	LRL-2012-263	VanArsdall	Mar 2009		2014	2014/2018	-	_	In Construction
						,			2013 (Year 5) monitoring report delayed to include
									wetland delineation data to be collected in Spring
	LRL-2007-00615	Fry/		1/12/06		2009	Year 5		2014. Project has Sericea Lespedeza present that needs
Guy Cove	9/17/07	Mulhall		8/15/07	Mar 2009	2013	(2013)	Open	to be addressed
	LRL-2009-611-pgj	Fry/		4/16/08			Year 4	,	
Mill Creek	7/20/09	Mulhall	Feb 2008	5/13/09	Oct 2009	2010/2014	(2013)	Open	In Monitoring (Year 5:2014)
		Fry/		10/14/05					
N Fk KY River tree planting	NA	Ozburn		-	2006	-	-	Closed	no credits - trees cut by Perry Co Bd Educ
									· ·

Pond Creek (stream)	-	Fry/ VanArsdall	Apr 2009	5/13/09	-	-	-	-	Not designed
		Fry/		5/13/09					
Pond Creek (wetland)		VanArsdall		5/13/09	_				Not designed
Fond Creek (Wetland)		Fry/		10/4/05	-	-	Year 5	-	Not designed
Red Lick Creek	LRL-2005-1331	Mulhall		4/18/07	Dec 07	2008/2012	(2012)	Open	Supplemental planting to occur in 2014
Red Lick Creek	LNL-2003-1331	IVIUIIIaii		4/10/07	Dec 07	2006/2012	(2012)	Ореп	
	1	F/		2/1/02			Nama		Beaver activities high on site so have proposed to plant
CECC Bank Chalding		Fry/		2/1/03	4 2007	2000 2012	None	Delegand	a heavy seed mix of native herbaceous plants in spring
SECC Bank Stabilization	NA	Mulhall		5/10/06	Apr 2007	2008-2012	required	Released	2014.
	LRL-2005-00205	Fry/		7/17/03			Year 5	_	Maintenance and repairs and supplemental planting to
Terrys Branch	6/27/06	Ozburn	June 2003	10/5/05	Dec 2007	2008-2012	(2012)	Open	occur in 2014.
	LRL-2009-433-pgj	Fry/		1/12/05					
Upper Cane Creek	10/18/09	Nowak		2/18/09			-	Open	Road relocation issues being resolved
SALT RIVER	1								
		Tewksbury/		1/16/08					
Harrison Fork	-	Lewis		-	-		-	-	In Design
	LRL-2009-98-pgj	Tewksbury/		7/18/06			Year 1		
South Fork of Curry's Fork	9/29/09	Mulhall	April 2006	5/13/09	2013	2013/2017	(2013)	Open	In Monitoring (Year 2:2014)
GREEN RIVER									
	1	Jackson/	Mar 2010	3/17/10					
Eagle Cr Tributary (Stream)	-	VanArsdall			-	-	-	-	In Design
		Jackson/	Mar 2010	3/17/10					
Eagle Cr Tributary (Wetland)	-	VanArsdall			-	-	-	-	In Design
		Jackson/		12/2/09					
Forestland Gr Tract (Stream)	-	VanArsdall			-	-	-	-	Not designed
Forestland Gr Tract		Jackson/		12/2/09					-
(Wetland)	-	VanArsdall			-	-	-	-	Not designed
	LRL 2004-01363	Jackson/		5/5/04			Year 5		
Haney Fk Watershed No. 2	5/26/05	Mulhall	Mar 2004	4/13/05	2006	2007/2011	(2011)	Released	Released from monitoring in FY 2012
	LRL-2008-936-pgj	Jackson/		6/7/06		·	Year 4		In Monitoring (Year5:2014). Supplemental planting to
Trammel Creek	4/24/09	Mulhall	Apr 2006	2/18/09	2010	2010/2014	(2013)	Open	occur in 2014.
JACKSON PURCHASE	, , ,		P	, -,		,	\/	- 1	
		Fry/		6/4/03					
Obion Creek	200300263	Mowrey		6/4/03	2006	2007/2011	2011	Open	In Monitoring
		Fry/		4/16/08		,			
Obion Creek II	MVM-2010-074	Mowrey	Feb 2008	5/13/09	-	-	-	Open	In Construction